

**This listing of claims will replace all prior versions, and listings of claims, in the application.**

**Listing of Claims:**

- 1) (Canceled)
- 2) (Canceled)
- 3) (Canceled)
- 4) (Canceled)
- 5) (Canceled)
- 6) (Canceled)
- 7) (Canceled)
- 8) (Canceled)
- 9) (Previously presented) A computer system operation method for use with a CAD system in modeling objects, said method providing a means for identifying geometric cells of a model, the method comprising:
  - a) receiving input comprising one or more constraints relating to geometric cell information, wherein at least one of said input constraints is selected from the group consisting of:
    - a) constraints relating to cell dimension;
    - b) constraints relating to the topology of a cell;
    - c) constraints relating to the history of the model evolution;
    - d) constraints relating to specific attributes of a cell; and

- e) constraints relating to geometrical indications of a cell, and wherein each constraint is specified in a declarative syntax, wherein the declarative syntax is simple and intuitive;
  - b) selecting the first constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of the constraint;
  - c) searching the cells of the model and retaining as a subset only the cells that meet the requirement of the first constraint of said input;
  - d) selecting the next constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of said next constraint;
  - e) searching the subset of cells and retaining in the subset only the cells that meet the requirement of said next constraint of said input; and
  - f) repeating steps d) and e) for each of the remaining constraints in said input.
- 10) (Canceled)
- 11) (Previously presented) A CAD apparatus comprising:  
an input device; and  
a central processing unit;  
wherein the central processing unit runs an application program comprising code for:
- a) receiving input comprising one or more constraints relating to geometric cell information of a model, wherein at least one of said input constraints is selected from the group consisting of:
    - a) constraints relating to cell dimension;
    - b) constraints relating to the topology of a cell;
    - c) constraints relating to the history of the model evolution;
    - d) constraints relating to specific attributes of a cell; and
    - e) constraints relating to geometrical indications of a cell, and

wherein each constraint is specified in a declarative syntax, wherein the declarative syntax is simple and intuitive;

- b) selecting the first constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of the constraint;
- c) searching the geometric cells of the model and retaining as a subset only the geometric cells that meet the requirement of the first constraint of said input;
- d) selecting the next constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of said next constraint;
- e) searching the subset of geometric cells and retaining in the subset only the geometric cells that meet the requirement of said next constraint of said input; and
- f) repeating steps d) and e) for each of the remaining constraints in said input.

12) (Canceled)

13) (Canceled)

14) (Canceled)

15) (Previously presented) Computer executable code stored on a computer readable medium, the code comprising means for causing a CAD computer system to perform a method providing a means for identifying geometric cells of a model, the method comprising:

- a) receiving from a user an input comprising a script comprising one or more constraints relating to cell information, wherein at least one of said input constraints is selected from the group consisting of:
  - a) constraints relating to cell dimension;
  - b) constraints relating to the topology of a cell;
  - c) constraints relating to the history of the model evolution;
  - d) constraints relating to specific attributes of a cell; and

- e) constraints relating to geometrical indications of a cell, and wherein each constraint is specified in a declarative syntax, wherein the declarative syntax is simple and intuitive;
  - b) selecting the first constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of the constraint;
  - c) based on the received script, searching the cells of the model and retaining as a subset only the cells that meet the requirement of the first constraint of said input;
  - d) selecting the next constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of said next constraint;
  - e) searching the subset of cells and retaining in the subset only the cells that meet the requirement of said next constraint of said input; and
  - f) repeating steps d) and e) for each of the remaining constraints in said input.
- 16) (Canceled)
- 17) (Canceled)
- 18) (Canceled)
- 19) (Canceled)
- 20) (Canceled)
- 21) (Canceled)
- 22) (Canceled)
- 23) (Canceled)

Application No. 09/815,896  
Request for Continued Examination  
Docket No. 80-20689263 (formerly 5974-73)

24) (Canceled)

25) (Currently amended) The method of claim ~~1~~ 9 wherein the declarative syntax comprises a scripting language program received as a CAD system user input.